JOURNAL OF THE ASIATIC SOCIETY OF BANGLADESH SCIENCE

ISSN 1016-6947

Vol. 45 No. 2 December 2019

Editor Md. Shafiqur Rahman

Associate Editor Amal Krishna Halder



THE ASIATIC SOCIETY OF BANGLADESH

Journal of the Asiatic Society of Bangladesh (Science)

EDITORIAL BOARD 2018 and 2019

Chairman : Professor Md. Harunor Rashid Khan

Editor : Professor Md. Shafiqur Rahman

Associate Editor : Professor Amal Krishna Halder

Members : Professor Hafiza Khatun

Professor Md. Abdul Karim

Professor Dr. M.K.I. Quayyum Choudhury

Journal of the Asiatic Society of Bangladesh, Science is published twice a year (June and December comprising one volume) in English. Original research papers dealing with all branches of science with special reference to Asiatic studies by the members of the Society are published. Any non-member of the Society may publish a research paper if it is communicated by a member of the Society.

SUBSCRIPTION

Annual per volume: Single issue:

CORRESPONDENCE

All correspondence should be addressed to The General Secretary, The Asiatic Society of Bangladesh, 5 Old Secretariat Road (Nimtali), Ramna, Dhaka-1000, Bangladesh. Phone: 9576391, E-mail: asiaticsociety.bd@gmail.com, www.asiaticsociety.org.bd

PRINTED BY

SRI Printing Press 8/12 Babupura, Nilkhet, Dhaka-1205

JOURNAL OF THE ASIATIC SOCIETY OF BANGLADESH SCIENCE

Vol. 45	No. 2	December	2019
---------	-------	-----------------	------

CONTENTS

- 151-159 SEED GERMINATION IN SIX ANTICANCEROUS PLANTS OF BANGLADESH Nahid Sultana, M. Oliur Rahman and Md. Abul Hassan
- 161-173 NEW RECORDS OF THE GOATFISH, UPENEUS VITTATUS
 (FORSSKAL 1775) AND UPENEUS SUPRAVITTATUS (UIBLEIN AND
 HEEMSTRA 2010) (PRECIFORMES, MULLIDAE), FROM SAINT
 MARTIN'S ISLAND IN THE BAY OF BENGAL, BANGLADESH Shilpi
 Saha, Subrina Sehrin, Abdullah-Al-Masud, Kazi Ahsan Habib, Anirban Sarker
 and Mohammad Abdul Baki
- 175-186 SANCTUARY STATUS ON DIVERSITY AND PRODUCTION OF FISH AND SHELLFISH IN SUNAMGANJ DEKAR HAOR OF BANGLADESH M. S. Islam and Afzal Hossain
- 187-196 HISTOPATHOLOGY AND MOLECULAR CHARACTERIZATION OF MICROSPORIDIAN PARASITES IN CULTURED SHRIMP PENAEUS MONODON FABRICIUS 1798 OF BANGLADESH Md. Munjur Hossain, Nusrat Jahan Punom, Md. Mostavi Enan Eshik, Mst Khadiza Begum, Md. Aminul Islam Bhuiyan and Mohammad Shamsur Rahman
- 197-207 GROWTH AND NUTRIENT COMPOSITION OF INDIAN SPINACH GROWN IN SALINE SOIL USING TREATED WATER Farzana Yasmin, Sayma Khanom and Shahid Akhtar Hossain
- 209-216 INCORPORATION OF SEQUENCE STRATIGRAPHY IN GAS RESERVOIR CORRELATION: A CASE STUDY Afroza Parvin and A.S.M. Woobaidullah
- 217-228 HYDROGEOCHEMICAL PROPERTIES PROVIDING LINKS TO METHANOGENESIS IN DEEP AQUIFER OF BHOLA ISLAND, BANGLADESH Masuma Chowdhury, Sarmin Sultana, Md. Atikul Islam, Aziz Hasan and Kazi Matin Uddin Ahmed
- 229-239 EFFECTS OF WETTING MEDIA CATTLE BLOOD, RICE GRUEL AND WATER ON THE YIELD AND AMINO ACID COMPOSITION OF TUBIFICID WORMS Mahmud Hasan, Md. Inja-Mamun Haque, Nafia Akter, Mohammad Shamsur Rahman and Afroza Sultana Eti
- 241-247 <u>EFFECTS OF DROUGHT STRESS ON GROWTH AND ACCUMULATION OF PROLINE IN FIVE RICE VARIETIES (ORYZA SATIVA L.)</u> Shukanta Saha, Hasna Hena Begum and Shamima Nasrin

249-259 APPLICATION OF REPEATED AVERAGE METHOD ON GENERALIZED FUZZY SOFT MATRIX FOR DECISION MAKING - M. K. Hasan, M. M. Rahman and Abeda Sultana

Short communication

261-265 A COMPARATIVE STUDY ON THE SELECTED PARAMETERS OF WATER QUALITY OF DHANMONDI, RAMNA AND HATIRJHEEL LAKES IN DHAKA CITY - Mahmuda Parvin, Mafia Muzahed and Ahmad Kamruzzaman Majumder

THE ASIATIC SOCIETY OF BANGLADESH Council 2018 & 2019

President: Professor Mahfuza Khanam

Vice-Presidents: Professor Mesbah-us-Saleheen

Professor Ahmed Abdullah Jamal

Professor Md. Harunor Rashid Khan

Treasurer: Professor Sajahan Miah

General Secretary: Professor Sabbir Ahmed

Secretary: Mr. Md. Abdur Rahim

Members: Mr. Ahmad Rafique (Fellow)

Professor Jamilur Reza Choudhury (Fellow)

Professor M. Delwar Hussain Professor Najma Khan Majlis

Professor S. M. Mahfuzur Rahman

Dr. Muhammad Abdul Mazid

Professor Syed Rashidul Hasan

Professor Dulal Bhowmik

Professor Hafiza Khatun

Professor Syed Azizul Huq

Professor Asha Islam Nayeem

Professor Md. Abdul Karim

Guidelines to authors

The Journal of the Asiatic Society of Bangladesh publishes original research papers related to any field of sciences from anywhere in the world.

All manuscripts written in English and typed on one side of a good quality paper (A4) with one and a half space and 2.54 cm margins on all sides should be submitted in duplicate (one copy without identity of the authors) to the Editor. However, authors from overseas countries may submit soft copy of the paper. Regarding publication of the paper after review, the decision of the Editorial Board shall be final. All papers accepted by the Editorial Board are subjected to editorial modifications.

The manuscript of a full paper, preferably be limited within 12 typed pages (A4) including tables, figures, graphs, references, etc. For short communication it should not exceed five pages.

The manuscript should contain the following sub-titles in sequence: Title, Abstract, Key words, Introduction, Materials and Methods, Results and Discussion, Acknowledgements, if any, and References. In case of 'Short Communication' no sub-titles are necessary.

Title: It should be brief and specific. The manuscript will have a separate title page giving name of the paper, authors name and address and a running head.

Abstract: It should not exceed 200 words containing the gist of results only.

Key words: Should not exceed 6 words and it should be after Abstract.

Text: The text of the article should be clear and precise. Introduction should be concise, precise and relevant to the study. Methods already published should be indicated by references. In case of modifications of a method give explicit descriptions. Results should be stated concisely and presented logically referring to tables and graphs. The same data should not be used both for the tables and for the graphs and/or figures. Simple data may be presented as a text instead of Tables and Figs. Each result should be followed by discussion or interpretation (in any case the Results and Discussion must not be separated) with appropriate reference(s). Discussion should deal with the obtained results and related results published nationally and internationally. Concluding remarks (without heading) must be given (that tally with the objective) in the last paragraph. The references in the text should be arranged chronologically.

Units: All measurements must be given in SI (International System) or SI-derived units.

Tables, Graphs and Figures: Number of tables, graphs and figures should be minimum. However, these should be typed separately. The graphs and figures should be drawn giving statistical analysis and properly labelled. The figures and graphs should be properly drawn with bold, solid lines so that these could be reduced up to half or less of the original. The photographs should be submitted on glossy papers or in JPEG format. Symbols in the graphs should be distinct and labels should be readable. Coloured photographs are also accepted.

References: In the text, references should be cited within brackets quoting author's surname and the year of publication in the appropriate place e.g. (Alva and Edwards 1990, Kabir 2005 and Khan *et al.* 2008). References should be arranged alphabetically according to author's surname at the end of the paper. Names of journals and books should be in italics giving edition, year of publication and name of the publishers.

Examples:

- Alva, A.K. and D.G. Edwards. 1990. Response of lupin cultivars to concentration of Ca and Al in dilute nutrient solutions. *J. Pl. Nutr.* 13: 57-76.
- Amin, F.B., Z.N. Tahmida Begum and R. Mandal, 2011. Impact of potassium and zinc on growth of cyanobacteria in seasonally flooded rice field of Meghna floodplain. *J. Asiat. Soc. Bangladesh, Sci.* 37(2): 251-255
- Helyar, K.R. and W.M. Porter. 1989. Soil acidification, its measurement and processes involved. *In:* Robson, A.D. (ed.) 'Soil Acidity and Plant Growth', Academic press, pp. 61-101.
- Kabir, S.M. 2005. Acid sulfate ecosystem and their sustainable management. Unpublished Ph.D. thesis. Department of Soil, Water and Environment. Univ. of Dhaka, Bangladesh.
- Khan, H.R., S.M. Kabir, M.M.A. Bhuiyan, F. Ahmed, S.M.A. Syeed and H.-P. Blume, 2008. Response of Mustard to Basic Slag and Aggregate Size Treatments under Modified-Plain-Ridge-Ditch Techniques Used for the Reclamation and Improvement of Cheringa Acid Sulfate Soil. *Soil and Environ.* 27(1): 1-10.
- Khoiyangbam, R.S. and N. Gupta. 2012. Introduction to Environmental Science. Publ. The Energy and Resources Institute, New Delhi.

The author(s) must submit one computer composed hard copy of the revised paper along with the CD in MS Word version 8.

Final galley proofs, if possible, will be sent to authors. No alternations or additions in the text are desirable at this stage.

Off-prints

A contributor of each paper is entitled to get 10 off-prints free of cost.

Declaration

While submitting a paper the individual authors are to sign a declaration to the effect that (i) the work reported has been carried out by them and they prepared the manuscript, (ii) they take public responsibility for the contents of the paper, (iii) the paper has not been published before in any referred scientific journal or has not been submitted to such journal for publication.

Review of books

Books for review should be sent to the Editor in duplicate.